

Birds of a feather flock to local sites for the winter

Winter seems like a bad time to watch birds – after all, birds are often scarce in the colder states because they have flown south to winter in warmer places. However, just like many people, numerous birds consider California a highly desirable place to spend their winter vacations.

Here in the Bay Area, especially in open and natural areas such as Mount Diablo, Del Valle Reservoir and our very own Site 300, we are graced with the presence of several interesting winter migrants that arrive from the Arctic, Canada and the Northern and Midwestern states during late fall. Perhaps most notable among these winter visitors are raptors (birds of prey such as hawks, owls and eagles).

California boasts one of the highest numbers and types of wintering raptors in North America, trumped only by Texas and Florida. Among the raptors that visit the Tri-Valley region only during the winter are ferruginous hawks (*Buteo regalis*) and rough-legged hawks (*Buteo lagopus*). Both species inhabit grassland habitats; undoubtedly, this is why they are attracted to Livermore and Site 300.

Rough-legged hawks are so named because their feathered legs make them look like they're wearing legwarmers. The closely related ferruginous hawks share this unusual feature, which is an adaptation to living in cold climates. Most other raptors, and in fact most birds, have bare lower legs, with feathers only on their thighs. Both ferruginous and rough-legged hawks are generally streaky, with a mix of cinnamon brown to dark brown and white feathers. These hawks are quite large, with wingspans of 4-5 feet and sleek bodies that are nearly 2 feet long. Hawks are skillful hunters and seek out and eat small mammals like mice, voles, rats, ground squirrels and sometimes even feast on small birds or rabbits found in our rolling grasslands. Their regally hooked beaks and heavy talons give them all the hunting tools required beyond their strong wings and sharp eyesight.

The ferruginous hawk is quite a committed bird, as it forms long-lasting monogamous relationships. One pair nested together for 28 years, raising 66 ferruginous hawk fledglings during 19 of those years. Ferruginous hawks breed as far away as Canada, and winter in the Western states and in Mexico.

On the other hand, rough-legged hawks



By Jennifer Garrison

are quite the worldly travelers, breeding even farther afield in Alaska, the Canadian Arctic and northern Eurasia. Like many young travelers, rough-legged hawks often meet their mates while on their winter holidays. If you are lucky, you may witness a male

rough-legged hawk performing a soaring sky dance as he tries to court his favorite feathery female. He closes his wings, swoops down and climbs back up, stalls, and then swoops down again to repeat his hopeful dance. While rough-legged hawks do pair up monogamously to raise young, it seems this commitment may not last past that season. So goes the fickle nature of young love.

Many other raptors have made California and our LLNL sites their permanent home. A unique raptor here on the main campus is the white-tailed kite. You may spot the kites and their young in nests at the top of large trees on the northern edge of campus during the summer months. This winter, take a moment to look to the skies and you may spot golden eagles, turkey vultures, red-tailed hawks, Cooper's hawks, American kestrels and even perhaps a bald eagle.



During the winter months, Site 300 bird watchers may spy several interesting migrants, including the adult kite (top right) and kite babies (above). The ferruginous hawk (center) and the rough-legged hawk (right) can be detected by their mix of light and dark brown and white feathers. These hawks have a large wingspan of 4-5 feet, as displayed by Lab biologist Michael van Hattem.



Photos by Michael van Hattem and Pete Bloom